16. (new) A process as claimed in claim 1, wherein the step of depositing the multilayer reflective dielectric optical coating over the device layer comprises depositing successive quarterwave dielectric coatings.

17. (new) A process as claimed in claim 1, wherein the multilayer reflective dielectric optical coating functions as a dichroic filter.

Remarks:

Claims 1-17 are pending in this application. Claim 1 has been amended in various particulars as indicated hereinabove. New Claims 16 and 17 have been added to alternatively define Applicants' invention.

Claims 1-15 have been rejected as being anticipated or obvious based on US 5,959,516 to Chang, *et al.* This rejection is traversed for the following reasons.

Claim 1 describes the deposition of a multilayer reflective dielectric optical coating and its subsequent patterning. This multilayer optical coating can function as a mirror or a dichroic filter, which is selectively reflective, for example.

In contrast, the Chang, *et al.* patent describes the deposition of a mere single oxide layer. It does not appear that its optical properties are relevant. There is no motivation to use a multilayer coating as claimed.

Thus, Applicants believe that the present claims are patentably distinguishable over the applied reference.

Attached hereto is a marked-up version of the changes made to the specification and claims by the instant amendments. The attached appendix is captioned "Version with Markings to Show Changes Made." Please note that due to the amendments, the page and line numbers may be different from the specification as originally filed. Please

further note that the page and line numbers hereinabove are relative to the original specification.

Applicants believe that the present application is in condition for allowance. A Notice of Allowance is respectfully solicited. Should any questions arise, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

AXSUN TECHNOLOGIES, INC.

By_____
J. Grant Houston, Esq.
Registration No.: 35,900
Tel.: (978) 262-0049
Fax: (978) 262-0035

Billerica, Massachusetts 01821
Date: 24 December 2002

CLAIMS

What is claimed is:

1. (amended) A process for fabricating a deflectable optical MEMS structure having a dielectric coating, the process comprising:

forming a device layer;

depositing a multilayer reflective dielectric optical coating over the device layer;

depositing a mask layer over the device layer;

patterning the mask layer;

transferring a pattern of the mask layer into the dielectric coating; and

removing at least part of a sacrificial layer to release the device layer.

2. A process as claimed in claim 1, wherein the step of removing the sacrificial layer is performed after the patterning of the dielectric coating.

3. A process as claimed in claim 1, wherein the step of removing the sacrificial layer is performed, at least in part, before the patterning of the dielectric coating.

4. A process as claimed in claim 1, wherein the step of forming the device layer comprises depositing the device layer on the sacrificial layer.

5. A process as claimed in claim 1, wherein the step of forming the device layer comprises bonding the device layer to the sacrificial layer.

6. A process as claimed in claim 1, wherein the step of depositing the mask layer comprises depositing a photoresist material.

7. A process as claimed in claim 1, wherein the step of depositing the mask layer comprises depositing a metal layer.

8. A process as claimed in claim 1, wherein the step of patterning the mask layer comprises removing a portion mask layer in the optical port region.

9. A process as claimed in claim 1, wherein the step of patterning the mask layer comprises removing portions of the mask layer outside of the optical port region.

10. A process as claimed in claim 1, wherein the step of transferring the pattern of the mask layer into the dielectric coating comprises removing the mask layer and portions of the dielectric coating on the mask layer.

11. A process as claimed in claim 1, wherein the step of transferring the pattern of the mask layer into the dielectric coating comprises etching portions of the dielectric coating exposed by the mask layer.

12. A process as claimed in claim 1, further comprising patterning tethers into the device layer.

13. A process as claimed in claim 1, wherein the step of removing at least part of the sacrificial layer is performed after the step of depositing the dielectric optical coating; the process further comprising covering the dielectric optical coating with a protecting layer during removal of the sacrificial layer.

14. A process as claimed in claim 1, further comprising installing the membrane at one end of a laser cavity.

15. A process as claimed in claim 1, further comprising installing the membrane opposite a stationary reflector to form a tunable Fabry-Perot filter.

16. (new) A process as claimed in claim 1, wherein the step of depositing the multilayer reflective dielectric optical coating over the device layer comprises depositing successive quarterwave dielectric coatings.

Version with Markings to Show Changes Made

17. (new) A process as claimed in claim 1, wherein the multilayer reflective dielectric optical coating functions as a dichroic filter.